UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,694	10/16/2003	Hyun-Kwon Chung	1793.1074	6773

49455 7590 09/10/2008
STEIN, MCEWEN & BUI, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER	
SHIN, CHRISTOPHER B	

ART UNIT	PAPER NUMBER
2181	

MAIL DATE	DELIVERY MODE
09/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/685,694	**Applicant(s)** CHUNG ET AL.	
	Examiner Christopher B. Shin	**Art Unit** 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-20* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a)☒ All b)☐ Some * c)☐ None of:
 1.☒ Certified copies of the priority documents have been received.
 2.☐ Certified copies of the priority documents have been received in Application No. _____.
 3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date *20080325*.
4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment received August 17, 2007 has been entered and carefully considered. Claims 1-20 are pending in the application.

2. The applicant's past responses/amendment have repeatedly deferred responding to the examiner's rejections, and such actions will unnecessarily delay the examiner's effort to a compact prosecution. The examiner asks to applicant for better cooperation in order to establish the compact prosecution.

Response to Arguments

3. Applicant's arguments filed August 17, 2007 have been fully considered but they are not persuasive.

a. On page 5, Interview Summary Mailed on April 12, 2007, the examiner notes that the interview was conducted while the examiner was on extended medical leave and the examiner can only carefully review the Interview Summary of April 12, 2007.

b. On page 5-6, the statement about the interview dates, the examiner initiated the interview on June 5, 2005 in response to the SPE's request (due to the extended medical leave), not in response to the voice mail.

c. On pages 6-7, the applicant only summarized part of the discussions; however, the most important discussion was the fact that examiner have repeatedly stated to Mr. Randall Svihla that the importance of compact prosecution.

- More specifically, the examiner stated to Mr. Randall Svihla that the Response to Non-Final Office action (7-22-05) of October 21, 2005, did not even mentioned anything about “not adequately explain why claims 1-9 of the present application are obvious over the various claims of the patent application publications relied upon by the Examiner”. Mr. Randall Svihla’s responded that he did not handle the case so he doesn’t know.

- More specifically, the examiner stated to Mr. Randall Svihla that the Response to Non-final Office action (6-21-06) of September 20, 2006, did not even mention anything about “not adequately explain why claims 1-9 of the present application are obvious over the various claims of the patent application publications relied upon by the Examiner”. Mr. Randall Svihla’s response was that he did not handle the case so he doesn’t know.
- More specifically, if you carefully consider the entire history of the present application, the applicant clearly delayed resolving issues about the Double Patenting Rejection.
- More specifically, the examiner also indicated to Mr. Randall Svihla that the teachings of the COPENDING PUBLICATION used in the double patenting rejection is owned by the same assignee and share many common assignee & there is no reason why, as one having ordinary skill in the art” does not understand the “substantially identical teachings” of the copending publications.
- More specifically, the examiner repeatedly informed Mr. Randall Svihla that further delaying responding to the Double Patenting rejection will further delay the prosecution.

- Most importantly, the examiner have clearly indicated to Mr. Randal Svihla that the 102/103 rejection has to be overcome by clearly showing that the claims 25-33 of Lamkin (729) reference does not have the support in the specification. This is the applicant's burden to prove that the claims 25-33 of the Lamkin (729) reference have absolutely no support from the specification. The examiner also indicated that mere argument does not meet the burden of proof.
- SUMMARY, as can be seen from the history/records of this application, the delay was caused by the applicant and it was intentional (i.e., the applicant failed to challenge the prima facie of the double patenting from the beginning- see the first response (10-21-2005) to the first office action mailed July 22, 2005.

d. On pages 8-9, the applicant's argument under The Present Application should Be Allowed to issue as a Patent before Lamkin 729 has not support and is not even relevant to the present situation.

Firstly, the present applicant is not even close to an allowance. For example, there are multiple double patenting rejections pending in the application and this alone prevents the possibility of having interference. Furthermore, the examiner try to communicate this to the applicant many times, but the applicant simply refuses to resolve this issue. Therefore, the applicant's above arguments has no relevance to the present application.

Secondly, the examiner is confused to the fact that the applicant is trying to get an allowance by delaying responding to the rejection. Clearly, during the telephone interview with Mr. Randall Svihla, the applicant made a clear indication that the response to the double patenting rejection will be delayed as much as possible. Consequently, the examiner indicated the fact that the case should go to the board for the resolution of the double patenting issues.

Thirdly, to response to the applicant's request on page 8, first paragraph, after carefully consulting with the IPS, the IPS clearly indicated that the all pending issues (i.e., double patenting rejection) must be cleared before even considering the possibility of interference. In addition, the examiner believes that the present applicant is not the "first application" in accordance with MPEP 2302, it is the "second application". Furthermore, the applicant should carefully consider the *"Practice 4"* and the Lamkin reference has the "earliest effective filing date".

e. On pages 9-17, the applicant's argument under Claims Rejections Under 35 USC 102 or 103 has been carefully considered. As also requested by the applicant, the examiner has consulted with the IPS regarding the art rejection under Lamkin 729. In addition, after consultation with the IPS, the art rejection based on the claims of Lamkin (US 2005/0278729) is proper so long as there is reasonable support for the copied claim. The examiner believes that there is a reasonable support for the copied claims. More proper and clear determination will be made as the Lamkin 729 case further prosecutes.

f. On pages 17-18, the two respective rejections are directed to two different interpretations of the claims and the teachings of the double patenting rejections; therefore, the applicant should respond each separately.

g. On pages 17-21, the applicant's arguments of comparison between the claimed recitations between the (017) publication and the present claims are not supported by the present claims in terms of FUNCTION of the term, and how the FUNCTION is

ACTUALLY UTILIZED in the context of the claim, unless applicant specifically & expressly define the claimed definition in the claim & specification. For example, there is no difference between the "content decoder" & "AV" in terms of the decoding contents in relation to markup document in the context of the claimed invention for reproducing AV data using a markup document. Therefore, they both are substantially identical with the difference already discussed in the rejection rational detail.

h. On page 21, in response to the applicant's argument of "Amending the Claims or filing a Terminal disclaimer Would Be Premature" the examiner have communicated to the prior attorney that all the applicant had to do is to agree that the Terminal Disclaimer will be filed at the time of an allowance (i.e,, this would have saved a lot of time); however, the present attorney of the case ignored and still argued that it is premature to do so.

i. Pages 22-25, the examiner disagrees with the applicant's arguments of Rejections 1-7, as discussed above in detail, the applicant's interpretations of the claimed recitations are not clearly supported by the presently claimed invention in combination with the teachings of the Publication Application used in the double patenting rejection.

For the above reasons, the examiner maintains the art rejection as follows.

Double Patenting

4. For the following rejections, the examiner relies on the entire claims of the following copending applications/publications. A specific examples/discussions of the following rejections are only the examples teachings of the claims. This applies to all of the following rejections.

5. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-55 of copending Publication No. US2003/0049017. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (017) Publication

- An apparatus for reproducing AV data
    - Claim 29, "apparatus for reproducing AV data"
- using a markup document
    - Claim 29, "recorded…with a markup language document"
- in an interactive mode, comprising:
    - Claim 29, "presentation engine"
- a buffer which buffers the markup document
    - claims 29/30, "buffer memory storing content of the markup language…the AV data"
- a content decoder which interprets the markup document; and
    - claim 29, "AV decoder decoding the AV data stored (content of the markup language document) in the memory
- a buffer manager which manages the buffer to preload the markup document
    - claim 29, "memory storing a preload file relating a content of the markup language document"
- and informs the content decoder of whether preloading of the markup document is completed
    - claim 29 "reading the preload file to be preloaded from the memory and …outputted by the AV decoder"

- wherein limitations of claims 2-9
    - Claim 17, "navigation data on the AV data, wherein the AV data is decoded in a AV data stream with reference to the navigation data", "the markup language document data comprises a preload list file including the file to be preloaded, and the preload information is implemented by an API which has location information & a property of the file of the preload list file as a parameter"

The difference between the claimed invention and the teachings of the (017) reference is that the (017) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (017) reference.

This is because the (017) reference teaches the overall substantial identical result/consequence of the intermediate details. As can be seen from the above teachings of (017) reference (claims 29 and 17), the reference clearly supports the AV decoder that utilizes the already stored data in the buffer/cache memory (see claims 29-30). This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (017), since the (017) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of copending Publication No. US2004/0139394. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (394) Publication

- o An apparatus for reproducing AV data
    - Claim 1, “apparatus for reproducing AV data”
- o using a markup document
    - Claim 1, “using a markup document”
- o in an interactive mode, comprising:
    - Claim 1, “in an interactive mode, comprising”
- o a buffer which buffers the markup document
    - claims 1, “buffer which buffers the document
- o a content decoder which interprets the markup document; and
    - claim 1, “content decoder which interprets the markup document

- a buffer manager which manages the buffer to preload the markup document
    - claim 1, “buffer manager which manages the buffer to preload the markup document”
- and informs the content decoder of whether preloading of the markup document is completed
    - claim 2, “buffer manager informs the content decoder of the buffering state information ”
- (claim 2) wherein the buffer manager informs the content decoder of whether the preloading of the markup document is completed utilizing an application program interface (API)
    - Claim 8, “buffer manager informs the content decoder of a buffering state information of the markup document utilizing an API”
- (claim 3) Wherein the buffer manager preloads the markup document into the buffer in response to a fetch signal
    - claims 4/9, “signal”, “wherein preloading of the markup document succeeded”
- (claim 4) a content decoder which interprets the markup document and outputs the fetch signal, wherein the buffer manager informs the content decoder of whether a command to preload the markup document, included in the fetch signal, has been successfully received.
    - Claims 9/22, “content decoder which interprets the markup document…a reproduce signal”, “the information of the buffer further includes information indicating whether preloading of the markup document is completed”
- (claim 5) wherein the content decoder generates the fetch signal using an API
    - claims 3, 6, 7, 11, 14, “content decoder generates … signal”
- (claim 6) , wherein the buffer manager informs the content decoder of whether the command has been successfully received using the API.
    - Claim 8, buffer manger informs the content decoder of the markup document utilizing an API
- (claim 7), further comprising a content decoder which interprets the markup document, wherein the content decoder checks whether preloading of the markup document is completed using an API.
    - Claims 8/15/5, “content decoder generates a report signal …being preloaded has been preloaded”
- (claim 8), wherein the API is an [obj].allDone Api
    - claim 5, “the API returns a value of 0 where the preloading of the markup document succeeded”
- (claim 9), wherein the [obj].allDone API returns a value of true to the content decoder where the preloading of the markup document is completed and returns a value of false to the content decoder where the preloading of the markup document is not completed.
    - Claim 5, “API returns a value of 0 where the preloading of the markup document succeeded, returns a value of 1 where the preloading of the markup document failed, and returns a value of 2 where the markup document is still being loaded”

The difference between the claimed invention and the teachings of the (394) reference is that the (394) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (394) reference. This is because the (394) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (394) reference, thought it is not expressly disclosed by the (394) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (394), since the (394) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-4, and/or 6-7 of copending Publication No. US2004/0139395. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (395) Publication

- An apparatus for reproducing AV data
    - Claim 1, "reproduce the AV data"
- using a markup document
    - Claim 1, "a markup document"
- in an interactive mode, comprising:
    - Claim 1, "in an interactive mode"
- a buffer which buffers the markup document

  - claim 1, “buffering state information of the markup document”
- a content decoder which interprets the markup document; and
  - claim 3, feature of a utilization of “control information includes an [obj.]isCached (URL, resType) API that generates a report signal…”, this is also supported by the specification [0015]
- a buffer manager which manages the buffer to preload the markup document
  - claim 4, “control information includes an API that returns a value of) in response to preloading of the markup document being successful”
- and informs the content decoder of whether preloading of the markup document is completed
  - claim 7, “the control information includes an API that is used to determine whether preloading of the markup document is completed”

- (claim 2) wherein the buffer manager informs the content decoder of whether the preloading of the markup document is completed utilizing an application program interface (API)
  - claim 7, “ the control information includes an API that is used to determine whether preloading of the markup document is completed”
  - (claim 3) Wherein the buffer manager preloads the markup document into the buffer in response to a fetch signal
    - claim 5, “the control information includes an API that generates a fetch signal used to issue a command to preload the markup document”, “control information which is provided to identify buffering state information of the markup document to be preloaded”
  - (claim 4) a content decoder which interprets the markup document and outputs the fetch signal, wherein the buffer manager informs the content decoder of whether a command to preload the markup document, included in the fetch signal, has been successfully received.
    - Claims 3 & 4, feature of a utilization of “control information includes an [obj.]isCached (URL, resType) API that generates a report signal…”, this is also supported by the specification [0015] & “the control information includes an API that returns a value of 0 in response to preloading of the markup document being successful”
  - (claim 5) wherein the content decoder generates the fetch signal using an API
    - feature of claims 3 & 5, “control information includes an [obj.]isCached (URL, resType) API that generates a report signal…”, this is also supported by the specification [0015] “the control information includes an API that generates a fetch signal”
  - (claim 6) , wherein the buffer manager informs the content decoder of whether the command has been successfully received using the API.
    - Feature Claims 3 & 6, feature of a utilization of “control information includes an [obj.]isCached (URL, resType) API that generates a report signal…”, this is also supported by the specification [0015], “API returns a response indicating whether the command to preload the markup document has been successfully transmitted using the fetch signal”
  - (claim 7), further comprising a content decoder which interprets the markup document, wherein the content decoder checks whether preloading of the markup document is completed using an API.
    - Feature Claims 3 & 6, feature of a utilization of “control information includes an [obj.]isCached (URL, resType) API that generates a report signal…”, this is also supported by the specification [0015], “API returns a response indicating whether the command to preload the markup document has been successfully transmitted using the fetch signal”
  - Limitations of claims 8 & 9

- obvious feature of "control information" that is similar to the claims 2-7, more specifically, it is close to [obj].isCached(URL, resTy[e) API.

The difference between the claimed invention and the teachings of the (395) reference is that the (395) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (395) reference. This is because the (395) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (395) reference, thought it is not expressly disclosed by the (395) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (395), since the (395) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of copending Publication No. US2004/0141716. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially

(i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (716) Publication

- An apparatus for reproducing AV data
    - Claims 1, 5, 8-11, “reproducing AV data”
- using a markup document
    - Claim 1, 5, 8-11, “using a markup document”
- in an interactive mode, comprising:
    - 1, 5, 8-11, ”in an interactive mode”
- a buffer which buffers the markup document
    - claims 10-11, “Controlling buffer manager to issue a response indicating whether the preloading of the markup document is completed”
- a content decoder which interprets the markup document; and
    - claim 11, “content decoder to generate an inquiry …whether markup document is completed”
- a buffer manager which manages the buffer to preload the markup document
    - claim 11, “buffer manager to issue a response …whet her the preloading of the markup document is completed”
- and informs the content decoder of whether preloading of the markup document is completed
    - claim 11, “buffer manager to issue a response …whet her the preloading of the markup document is completed…in response to the inquiry” from the content decoder.
- (claim 2) wherein the buffer manager informs the content decoder of whether the preloading of the markup document is completed utilizing an application program interface (API)
    - Claim 9, “inquiring whether preloading of the markup document is completed using an API”
    - (claim 3) Wherein the buffer manager preloads the markup document into the buffer in response to a fetch signal
        - claim 9, “in response to a fetch signal, controlling a buffer manager to issue a response indicating whether a command to preload the markup document”
    - (claim 4) a content decoder which interprets the markup document and outputs the fetch signal, wherein the buffer manager informs the content decoder of whether a command to preload the markup document, included in the fetch signal, has been successfully received.
        - Claim 10, “content decoder to generate a fetch signal to preload the markup document” & “in response to the fetch signal, controlling a buffer manager to issue a response indicating whether a command to preload the markup document has been successfully received”
    - (claim 5) wherein the content decoder generates the fetch signal using an API
        - claims 2 & 3,
    - (claim 6) , wherein the buffer manager informs the content decoder of whether the command has been successfully received using the API.
        - Claims 5 & 10, “buffer manger indicate whether the preloading of the markup document is completed”; “preloading of the markup document is completed using API”
    - (claim 7), further comprising a content decoder which interprets the markup document, wherein the content decoder checks whether preloading of the markup document is completed using an API.

  - Claims 5, 10- 11, "content decoder to generate an inquiry …whether markup document is completed" & buffer manger indicate whether the preloading of the markup document is completed"; "preloading of the markup document is completed using API"
- (claim 8), wherein the API is an [obj].allDone Api
  - claim 6, "the API is an [obj].allDone API"
- (claim 9), wherein the [obj].allDone API returns a value of true to the content decoder where the preloading of the markup document is completed and returns a value of false to the content decoder where the preloading of the markup document is not completed.
  - Claims 6 & 11, "content decoder to generate an inquiry to determine whether preloading of the markup document is completed"; "return value of true in response to the preloading of the markup document being completed and a return value of false in response to the preloading of the markup document being not completed"; "inquiring whether preloading …using [obj].allDone API"

The difference between the claimed invention and the teachings of the (716) reference is that the (716) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (716) reference. This is because the (716) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (716) reference, thought it is not expressly disclosed by the (716) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (716), since the (716) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Publication No. US2004/0143853. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (853) Publication

- o An apparatus for reproducing AV data
    - Claim 18, "reproducing AV data"
- o using a markup document
    - Claim 18, "using a markup document"
- o in an interactive mode, comprising:
    - Claim 8, "in an interactive mode"
- o a buffer which buffers the markup document
    - claims 18, "buffering the markup document"
- o a content decoder which interprets the markup document; and
    - claim 18, "staging the markup document for decoding"
- o a buffer manager which manages the buffer to preload the markup document
    - claim 18, "buffering the markup document to preload the markup document"
- o and informs the content decoder of whether preloading of the markup document is completed
    - claims 5 & 18, "determine whether the buffering of the markup document to preload the markup document succeeded" & "decoding in response to a retrieve signal"
- o (claim 2) wherein the buffer manager informs the content decoder of whether the preloading of the markup document is completed utilizing an application program interface (API)
    - Claims 5 & 18, , "API serves to determine whether the buffering of the markup document to preload the markup document succeeded" & "decoding in response to a retrieve signal"
- o (claim 3) Wherein the buffer manager preloads the markup document into the buffer in response to a fetch signal
    - claim 18, "buffering the markup document to preload the markup document in response to a fetch signal"
- o (claim 4) a content decoder which interprets the markup document and outputs the fetch signal, wherein the buffer manager informs the content decoder of whether a command to preload the markup document, included in the fetch signal, has been successfully received.

- Claims 18/11, “staging the markup document for decoding in response to a retrieve signal“ & “buffering the markup document to preload the markup document in response to a fetch signal” & “command to preload the markup document included in a the fetch signal”

- (claim 5) wherein the content decoder generates the fetch signal using an API
    - claims 14/16, “generating a fetch signal to preload the markup document”, “generating a report signal to determine a buffering state of the markup document”, “report signal comprises generating the report signal using an API”
- (claim 6) , wherein the buffer manager informs the content decoder of whether the command has been successfully received using the API.
    - Claim 8, buffer manger informs the content decoder of the markup document utilizing an API
- (claim 7), further comprising a content decoder which interprets the markup document, wherein the content decoder checks whether preloading of the markup document is completed using an API.
    - Claims 18/11, “staging the markup document for decoding in response to a retrieve signal“ & “buffering the markup document to preload the markup document in response to a fetch signal” & “command to preload the markup document included in a the fetch signal”
- (claim 8), wherein the API is an [obj].allDone Api
    - claims 5/7, “outputting of the buffering state information includes returning a value of 0 in response to the markup document being successfully preloaded”, “API serves to determine whether the buffering of the markup document to preload the markup document succeed or failed”
- (claim 9), wherein the [obj].allDone API returns a value of true to the content decoder where the preloading of the markup document is completed and returns a value of false to the content decoder where the preloading of the markup document is not completed.
    - claims 5/7, “outputting of the buffering state information includes returning a value of 0 in response to the markup document being successfully preloaded, returning a value of 1 in response to the markup document not being successfully preloaded, and returning a value of 2 in response to the markup document still being preloaded”, “API serves to determine whether the buffering of the markup document to preload the markup document succeed or failed”

The difference between the claimed invention and the teachings of the (853) reference is that the (853) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (853) reference. This is because the (853) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (853) reference, thought it is not expressly disclosed by the (853) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (853), since the (853Dd) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-55 of copending Publication No. US2003/0049017. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claims 1-9 (017) Publication

- An apparatus for reproducing AV data
    - Claim 29, "reproducing AV data"
- using a markup document
    - Claim 29, "markup language document"
- in an interactive mode, comprising:
    - Claim 29, "presentation engine"
- a buffer which buffers the markup document
    - claim 30, "buffer memory storing the AV data"
- a content decoder which interprets the markup document; and
    - claim 29, "Av decoder decoding the AV data stored in the memory"
- a buffer manager which manages the buffer to preload the markup document
    - claim 29, "memory to store the preload file to be preloaded ….markup language document"
- and informs the content decoder of whether preloading of the markup document is completed
    - claim 29, "memory storing a preload file …AV decoder decoding the AV data…presentation engine"
- (claim 2) wherein the buffer manager informs the content decoder of whether the preloading of the markup document is completed utilizing an application program interface (API)

    - Claims 5 & 17, , "the preload information is implemented by an API…which has the location information and property of the file to be preloaded as parameters"
    -
- Wherein limitations of claims 3-9
    - Claims 7, 8, 26, 29, "a presentation engine controlling the reader to read the preload file and the memory to store the preload file to be preloaded based on the preload information after interpreting the preload information included in the read markup language document…AV decoder", "preload information is implemented by an API", "API is a JavaScript API or a Java applet API", interpreting and executing an API"

The difference between the claimed invention and the teachings of the (017) reference is that the (017) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (017) reference. This is because the (017) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (017) reference, thought it is not expressly disclosed by the (017) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (017), since the (017) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Publication No. US2004/0247292. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending Publication also claims substantially (i.e., functionally and/or operationally) identical claimed subject matter as follows (as following chart represents substantially equivalent teachings in view of the support of the specification):

Claim 1 (292) Publication

- An apparatus for reproducing AV data
  - Claim 1, "reproducing AV data"
- using a markup document
  - Claim 1, "using a markup document"
- in an interactive mode, comprising:
  - Claim 1, "in an interactive mode"
- a buffer which buffers the markup document
  - claim 2, "buffer memory to buffer the AV data"
- a content decoder which interprets the markup document; and
  - claim 2, "decoder to decode bye buffered AV data"
- a buffer manager which manages the buffer to preload the markup document
  - claim 2, "buffer memory to buffer the AV data; a decoder to decode the buffered AV data". "presentation engine"
- and informs the content decoder of whether preloading of the markup document is completed
  - claim 2, "buffer memory to buffer the AV data; a decoder to decode the buffered AV data". "presentation engine"

The difference between the claimed invention and the teachings of the (292) reference is that the (292) does not expressly disclose a specific interaction intermediate details between buffer manager and content decoder of the completion notification; however, such difference in limitation is an obvious characteristics of the (292) reference. This is because the (292) reference teaches the overall substantially identical result/consequences of the intermediate details. This means that there is a clear functional obvious communication between the buffer/cache memory and the decoder. Therefore, the above intermediate details are taught by the (292) reference, thought it is not expressly disclosed by the (292) reference. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of the (292), since the (853Dd) reference teaches the substantially identical/equivalent teachings for performing the substantially identical results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kim et al. (US 2004/0184766 A1) or KR 10-2003-0016629.

14. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kim et al. (US 2004/0181816 A1) or KR 10-2003-0014164.

15. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Yoon et al. (US 2004/0175154 A1) or KR 10-2003-0014161.

The above 102(e) rejections are directed to clearly anticipated rejections and one skilled artisan in the art should understand the teachings of Kim and Yoon Publications. The applicant should carefully consider the entire teachings of the respective documents before responding to this office action.

Claim Rejections - 35 USC § 103

16. Claims 1-9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lamkin et al (US 2005/0278729 A1).

j. The examiner relies on the entire teachings of Lamkin as a whole. The applicant should carefully consider the entire teachings of Lamkin reference. Any further issues/arguments/teachings regarding these present applications, the entire teachings of Lamkin will be relied upon & should not be considered as new ground of rejection.

k. After carefully reviewing the teachings of claims 25-33 and the respective sections, the examiner strongly believes that the combinations of claims 25-33 are exactly and or substantially identical. In other words, the language used in the Lamkin reference seems to be either exactly and or substantially identical. More specifically, the teachings of figures 6-7 and accompanying description sections teach the claimed invention.

l. The Lamkin reference teaches all of the limitations as follows:

Claims 1-9	Lamkin Refernece Claims
• Claim 1	o Claim 25
• Claim 2	o Claim 26
• Claim 3	o Claim 27
• Claim 4	

  - Claim 28
- Claim 5
  - Claim 29
- Claim 6
  - Claim 30
- Claim 7
  - Claim 31
- Claim 8
  - Claim 32
- Claim 9
  - Claims 33

Claims 1-9 Figures 6-7 of Lamkin & accompanying descriptions

- An apparatus for reproducing AV data using a markup document in an interactive mode
  - System of figure 6-7
- Buffer which buffers the markup document
  - (206, 740)
- A content decoder which interprets the markup document
  - (410, 426, 710, 726, 736, 742,)
- A buffer manager which manages the buffer to preload the markup document and informs the content decoder of whether preloading of the markup document is completed
  - (410, 742)
- limitations of dependent claims
  - See further descriptions of figures 6-7 and the accompanying description section.

m. Since the Lamkin reference teaches all of the substantially/exactly identical teachings, the claimed invention is anticipated or obvious from he teachings of the Lamkin reference. In case of substantially identical situation, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of Lamkin reference, since the motivation & basic teachings are substantially disclosed by the Lamkin reference.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher B. Shin whose telephone number is 571-272-4159. The examiner can normally be reached on Monday Through Friday 6:30AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kindred Alford can be reached on 571-272-4037037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher B Shin/
Primary Examiner, Art Unit 2181

January 18, 2008
cs